

FIG. 1A

MULTIPLE CAMERAS WITH DEDICATED FILTERS

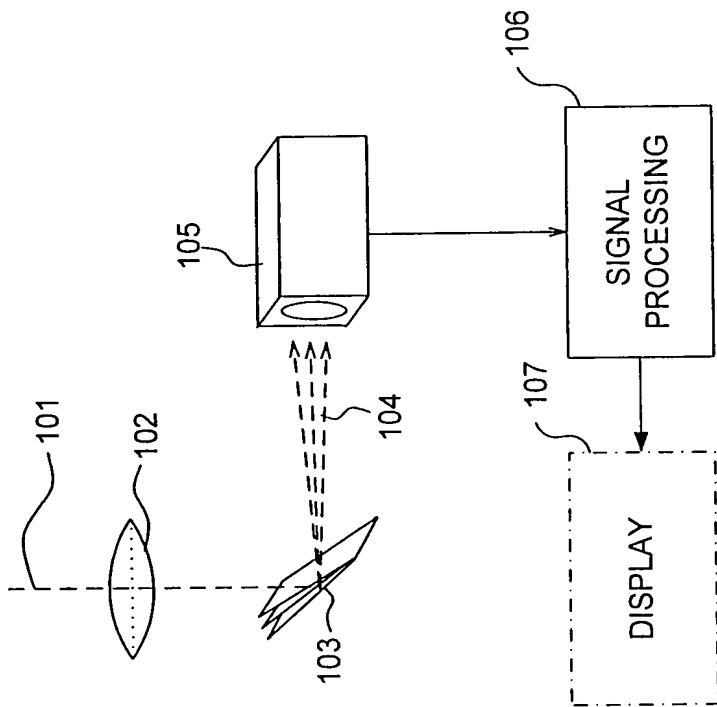


FIG. 1B

SINGLE CAMERA WITH STACKED FILTERS

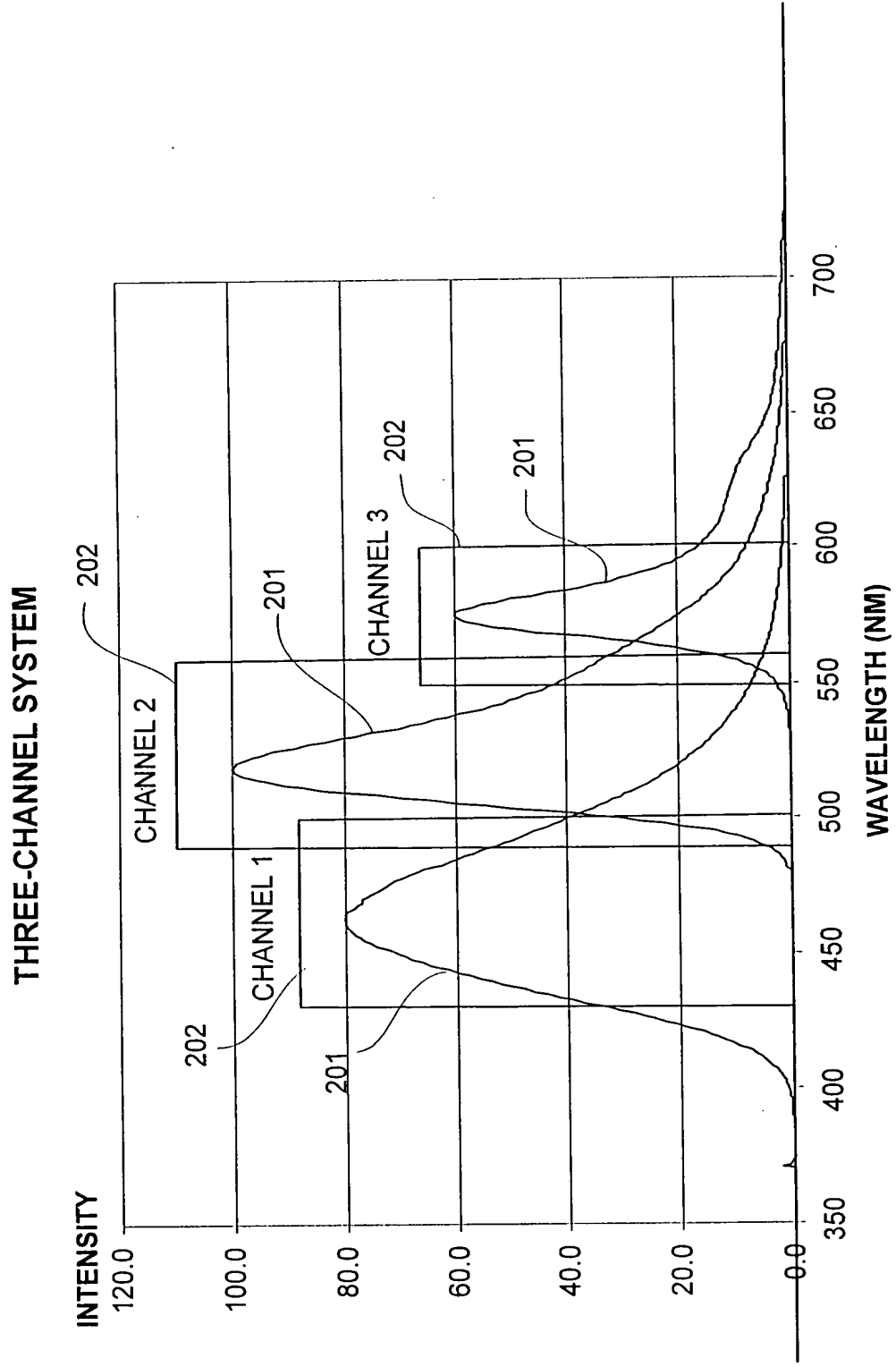


FIG. 2
*ILLUSTRATION OF CROSS-TALK IN
MULTICHANNEL IMAGING SYSTEM*

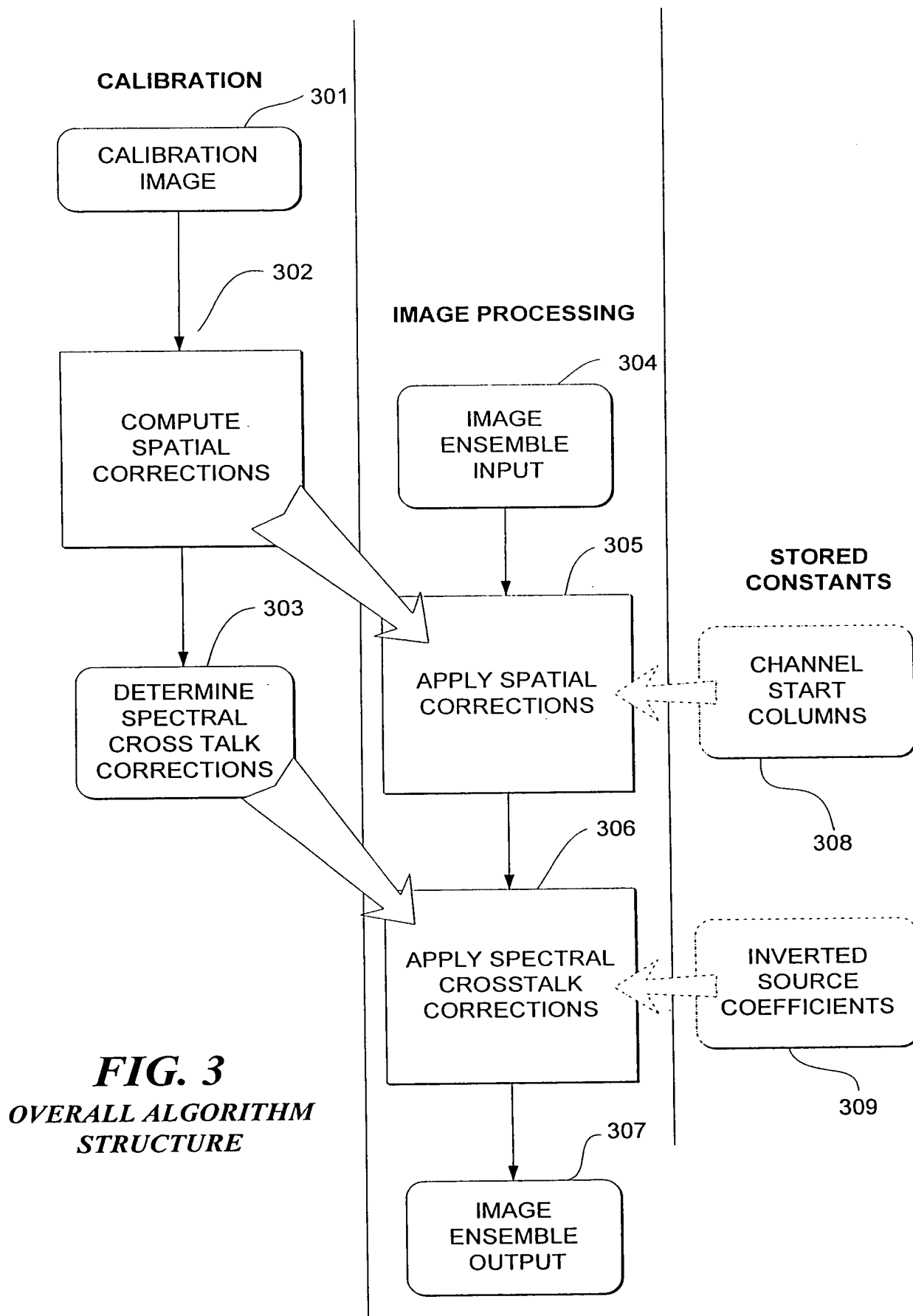


FIG. 3
OVERALL ALGORITHM
STRUCTURE

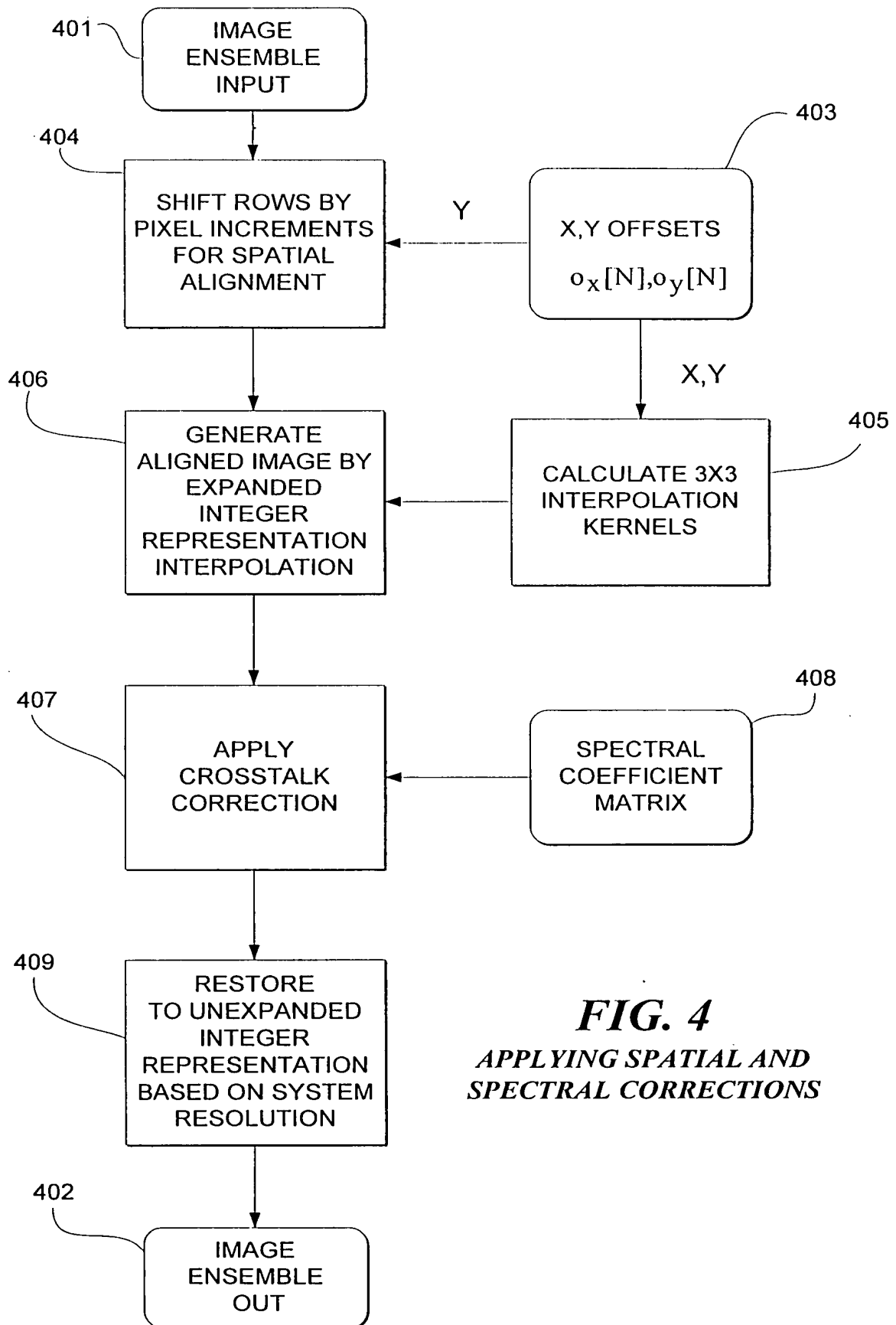


FIG. 4
APPLYING SPATIAL AND SPECTRAL CORRECTIONS

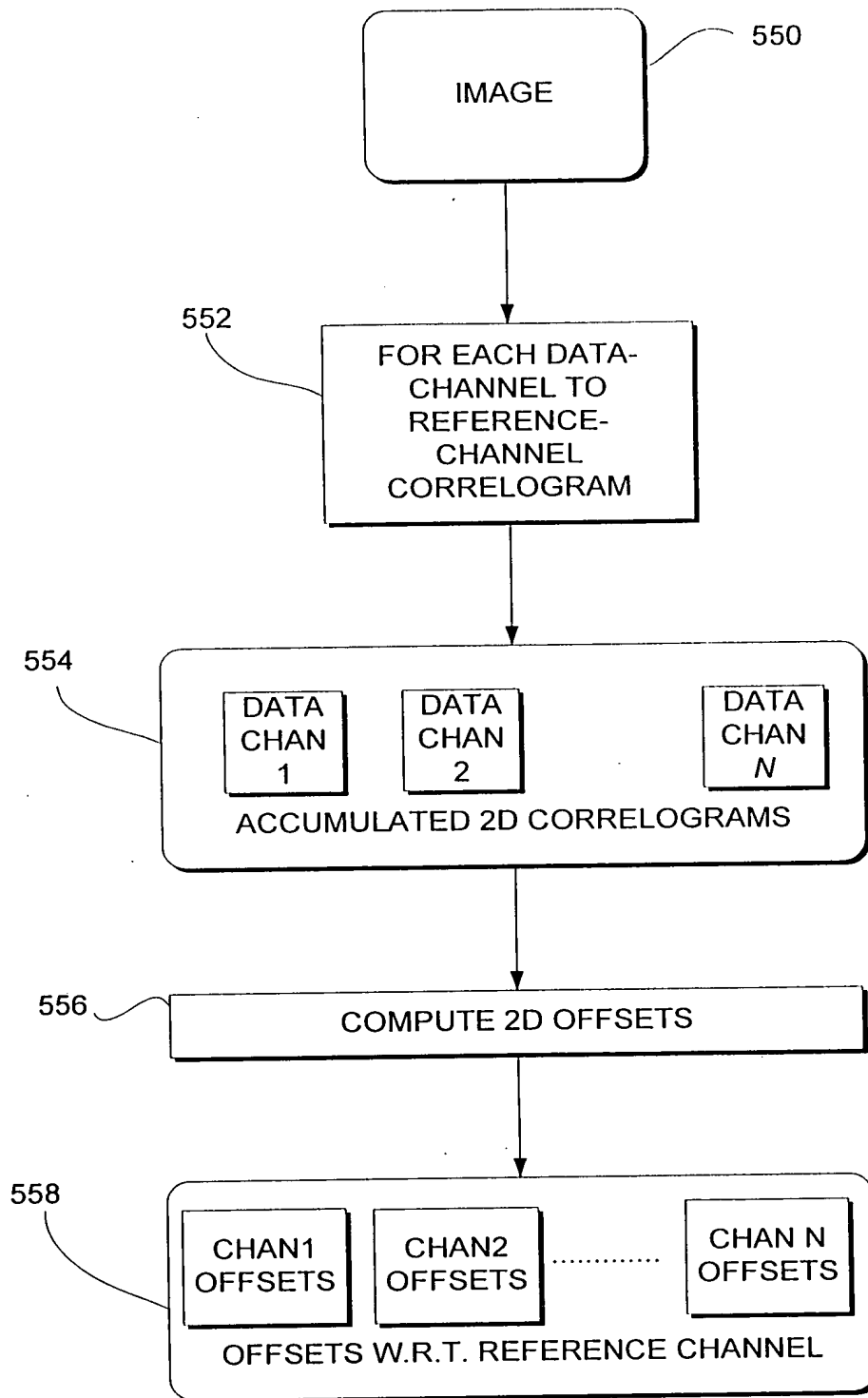


FIG. 5
COMPUTE SPATIAL OFFSETS
BETWEEN CHANNELS

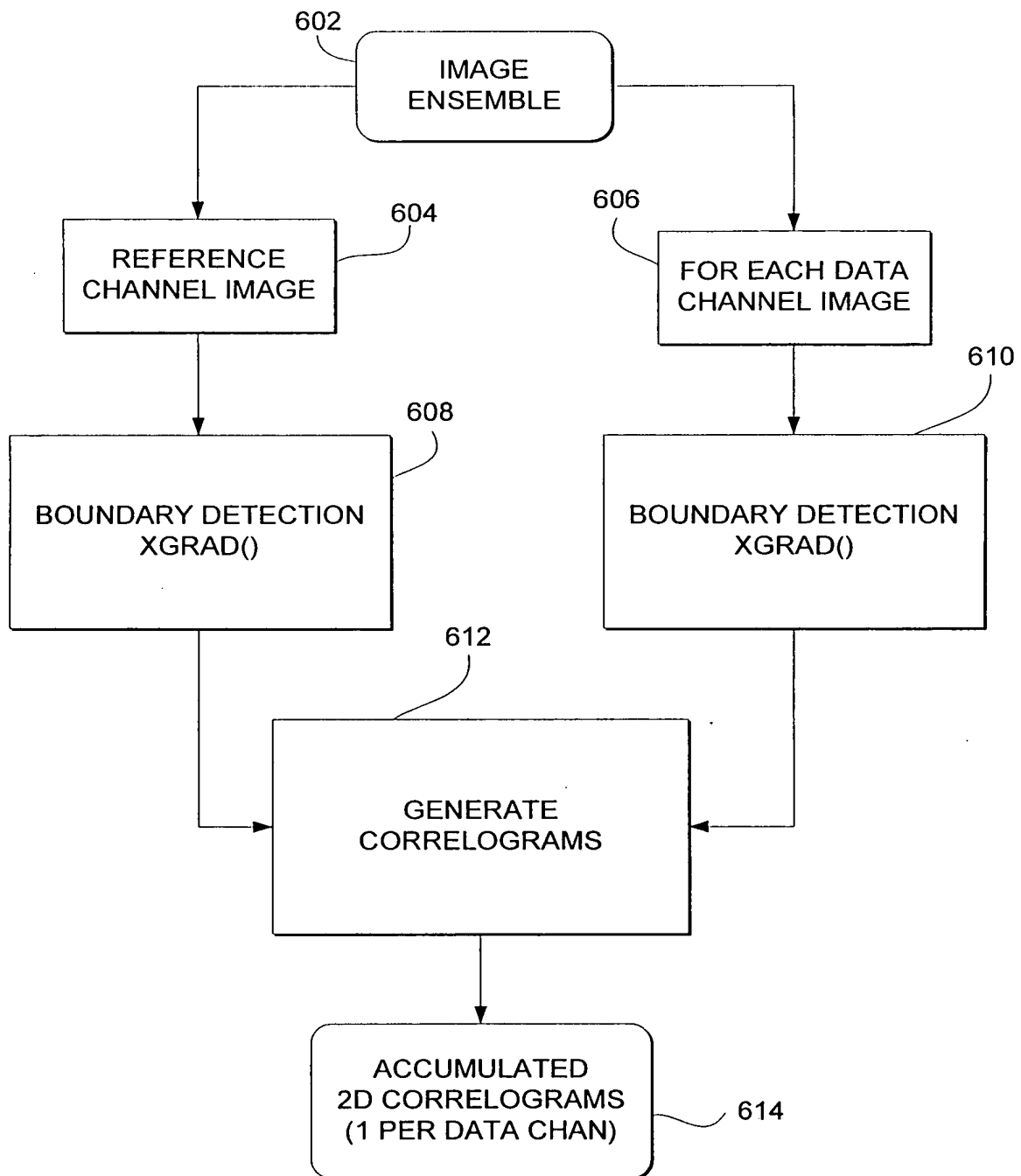
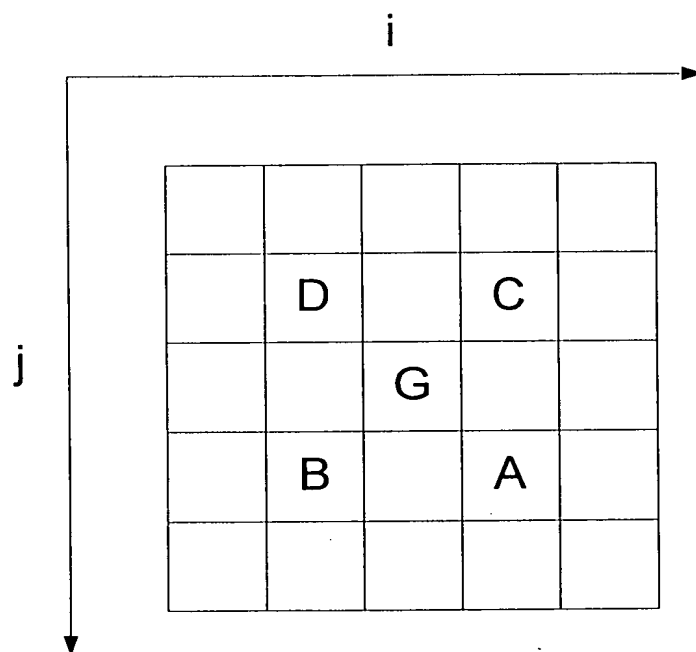
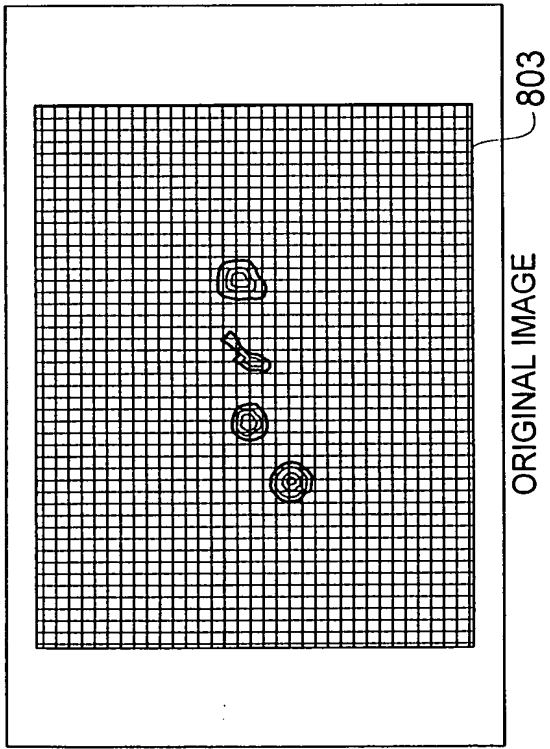


FIG. 6
BUILDING THE AVERAGE CORRELOGRAM

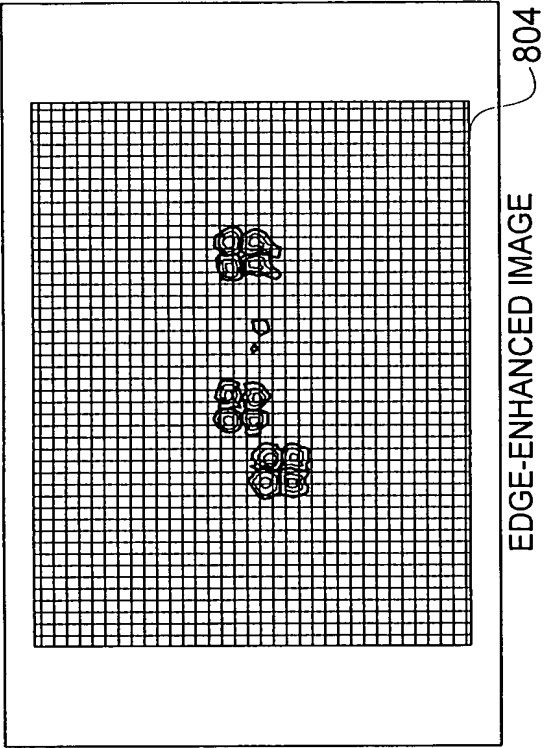
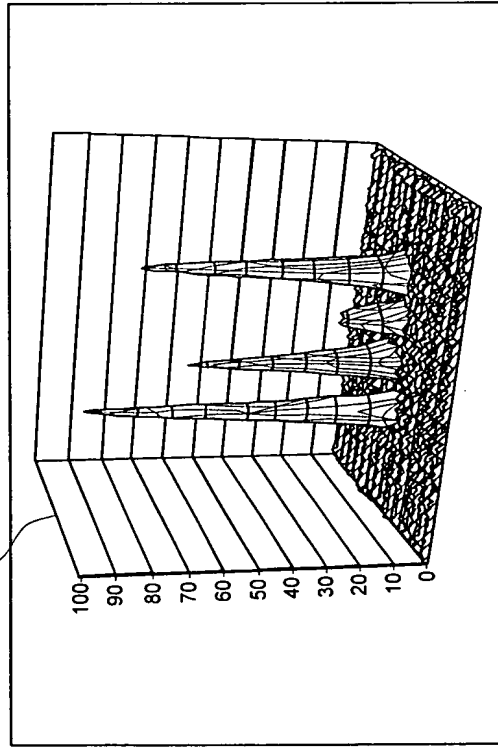


$$G = \text{abs}[(A - B) - (C - D)]$$

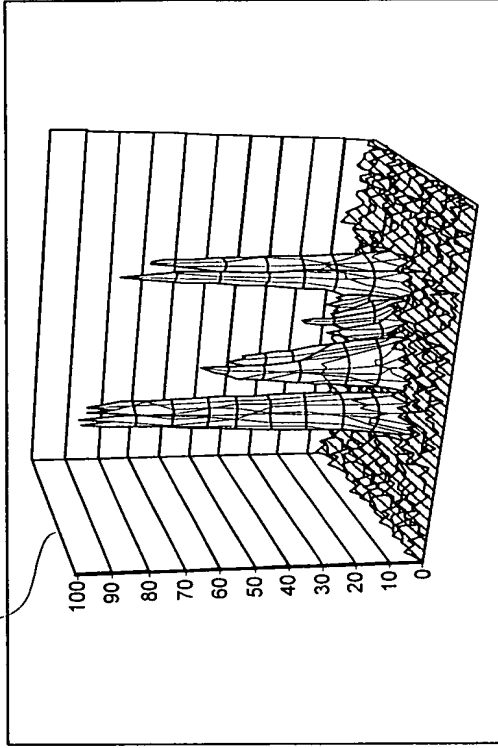
FIG. 7
2-DIMENSIONAL GRADIENT OPERATOR



801



802



EFFECT OF THE GRADIENT OPERATION

FIG. 8

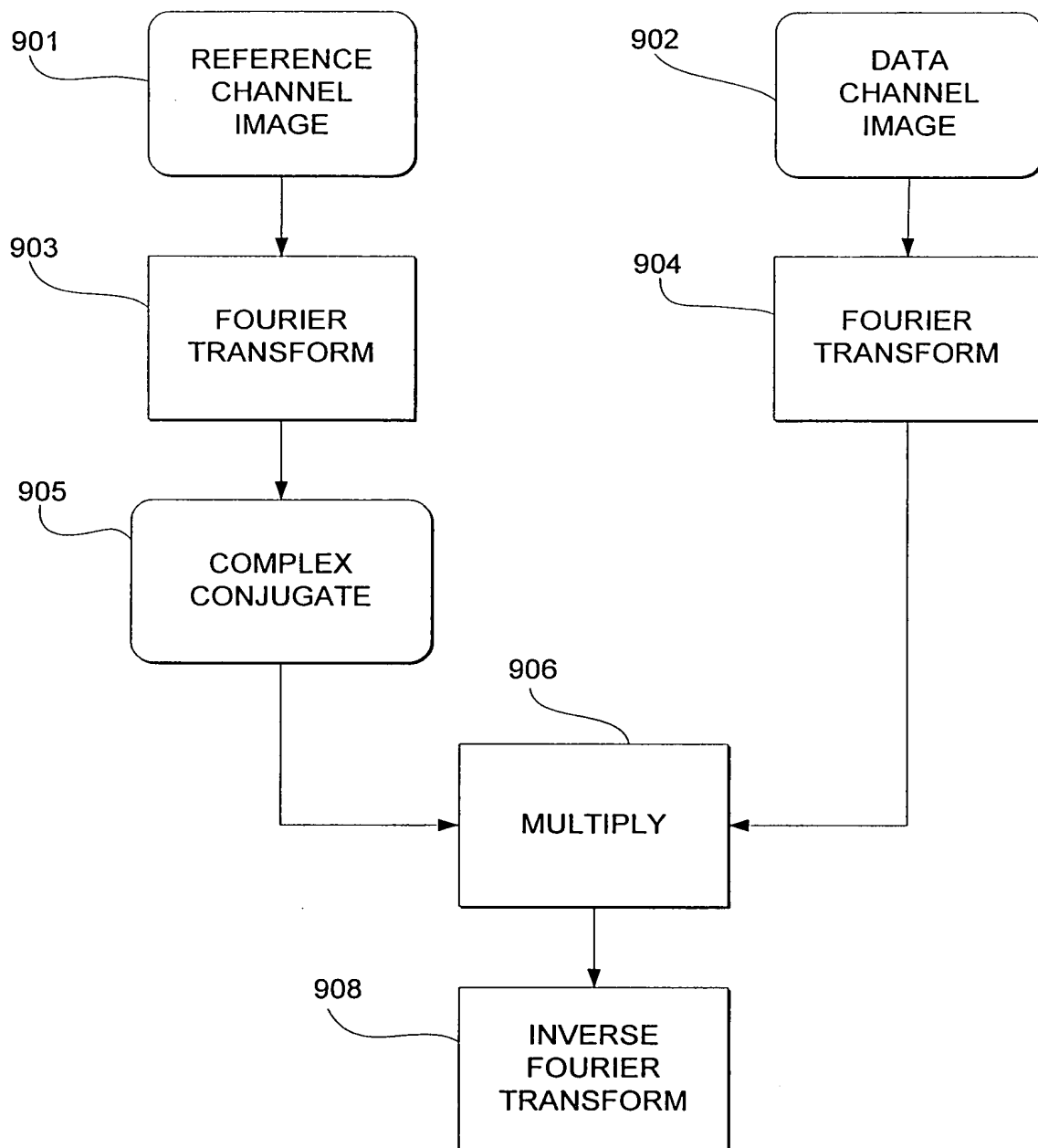


FIG. 9
CONVOLUTION AS MULTIPLICATION IN THE
FREQUENCY DOMAIN

CHANNELS:

REF

D1

D2

D3





























<u>1001</u>	<u>1002</u>	<u>1003</u>	<u>1004</u>
			
			
			
			
			
			
			

FIG. 10

1101

1102

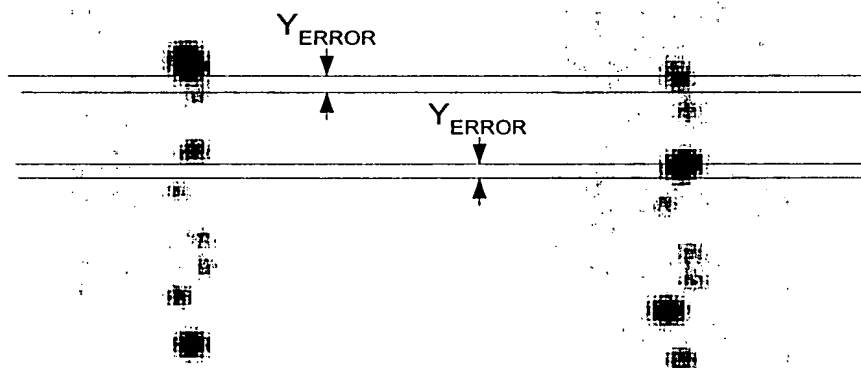


FIG. 11

***IMAGES TO BE
REALIGNED***

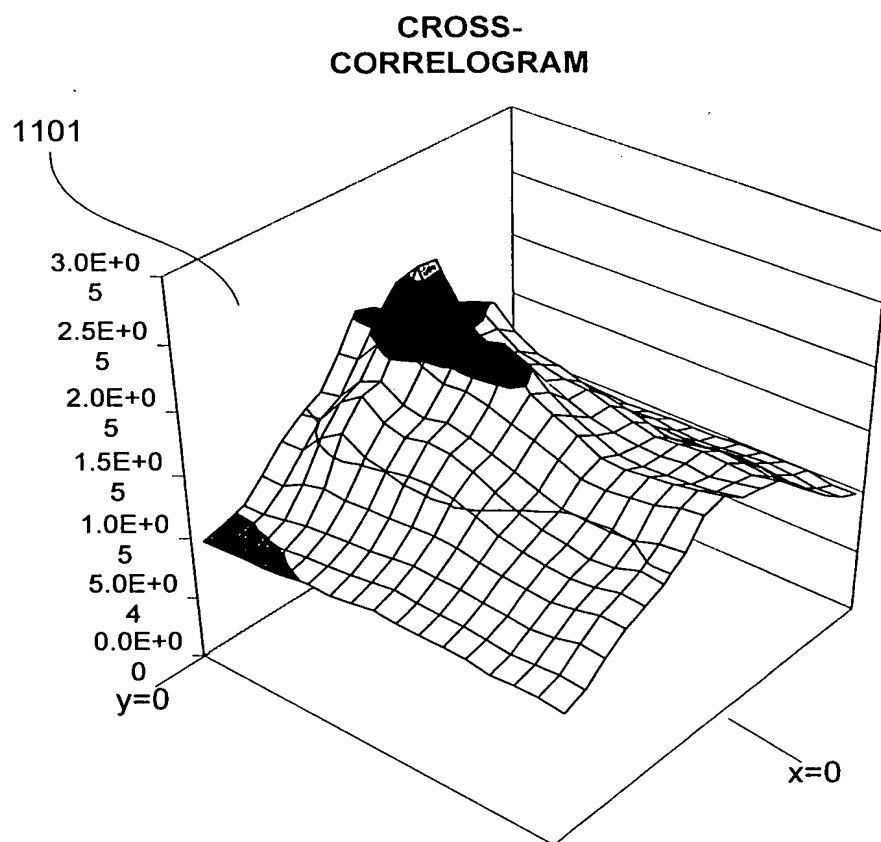


FIG. 12
CORRELOGRAM OF THE
MISALIGNED IMAGES

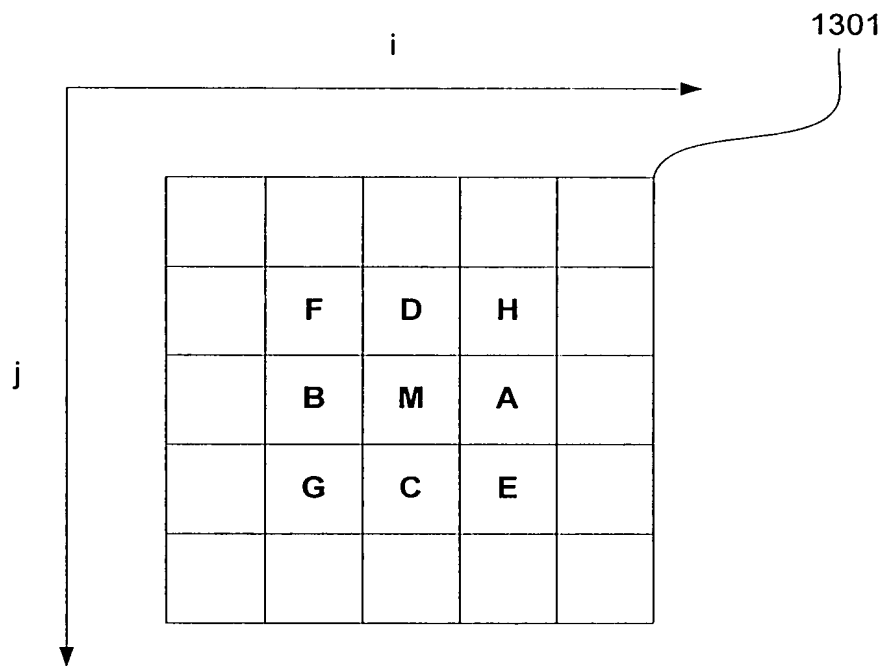


FIG. 13
PIXEL DESIGNATIONS FOR
CORRELOGRAM SURFACE
DERIVATIVES

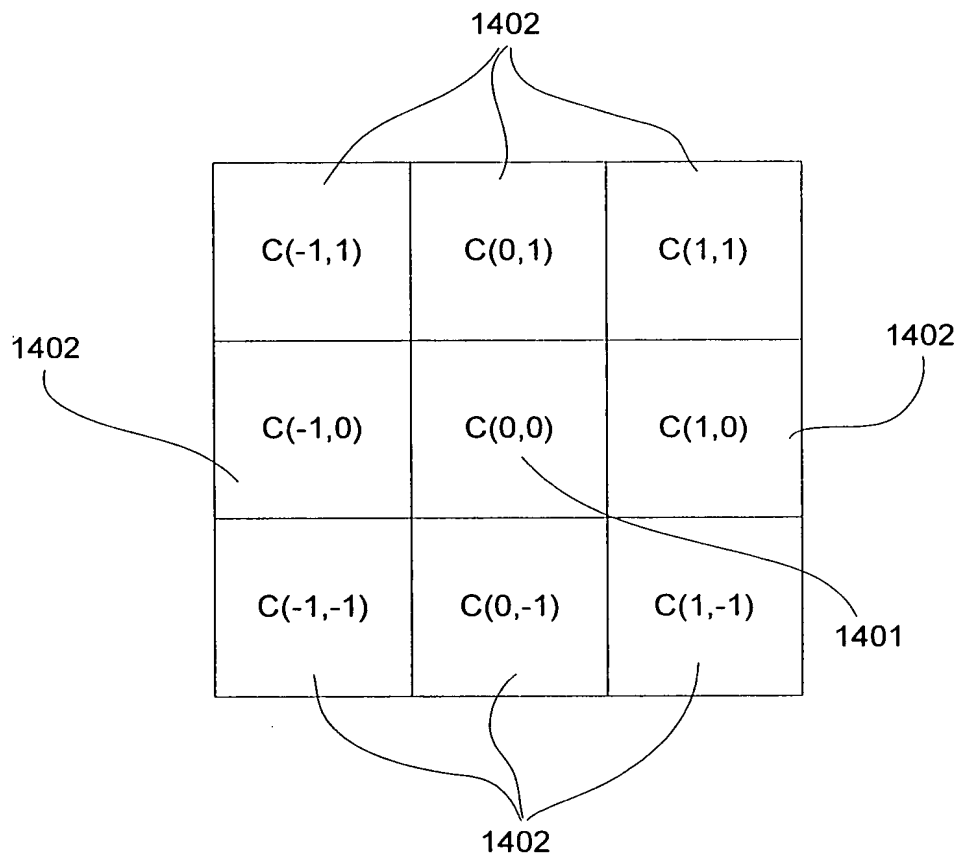
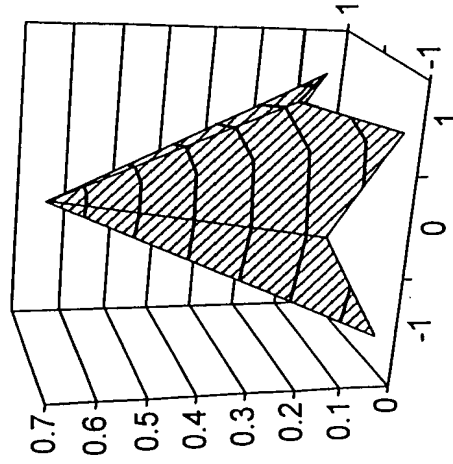


FIG. 14
COEFFICIENT MATRIX FOR
3X3 INTERPOLATION

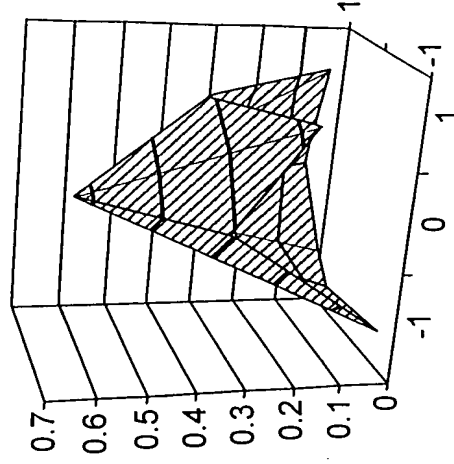
1501

INTERPOLATION COEFFICIENTS FOR
ZERO OFFSET CORRECTION



1502

COEFFICIENTS FOR OFFSET
OF 0.3, 0.3 PIXELS



3X3 IMAGE ALIGNMENT COEFFICIENT
MATRIX FOR TWO CASES

FIG. 15

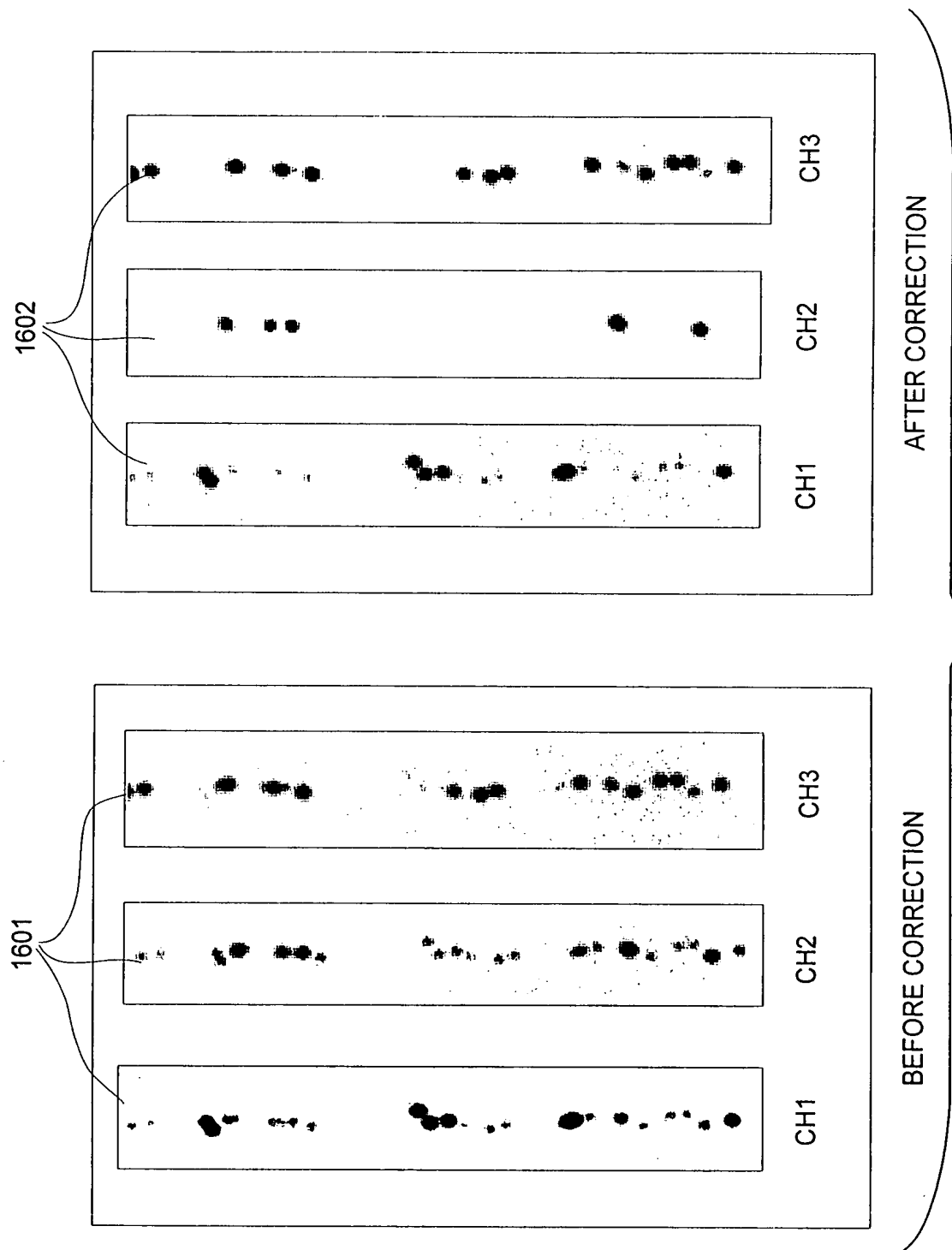
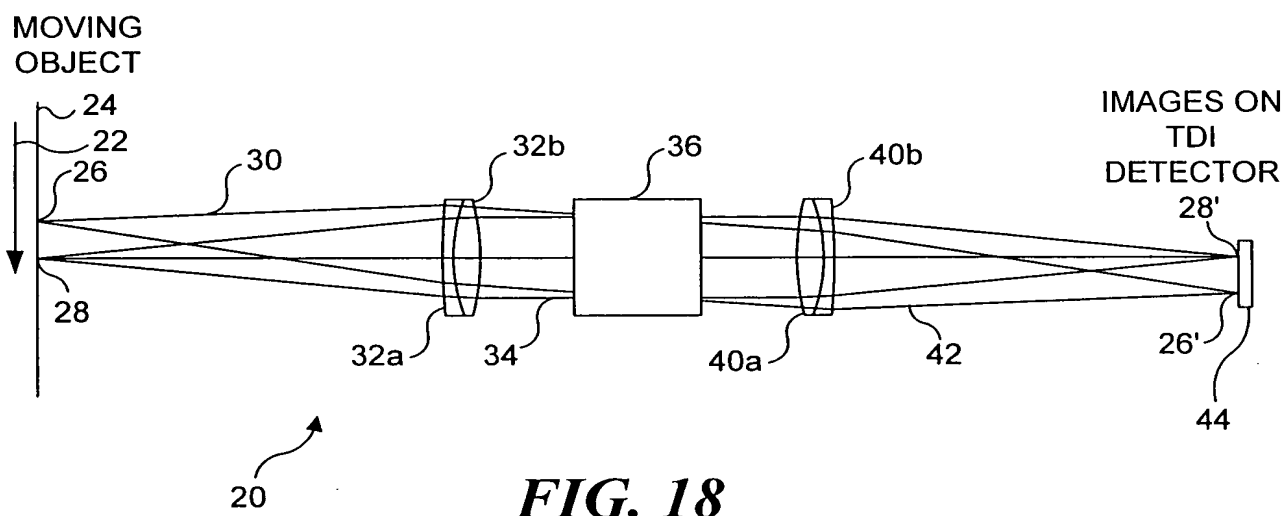
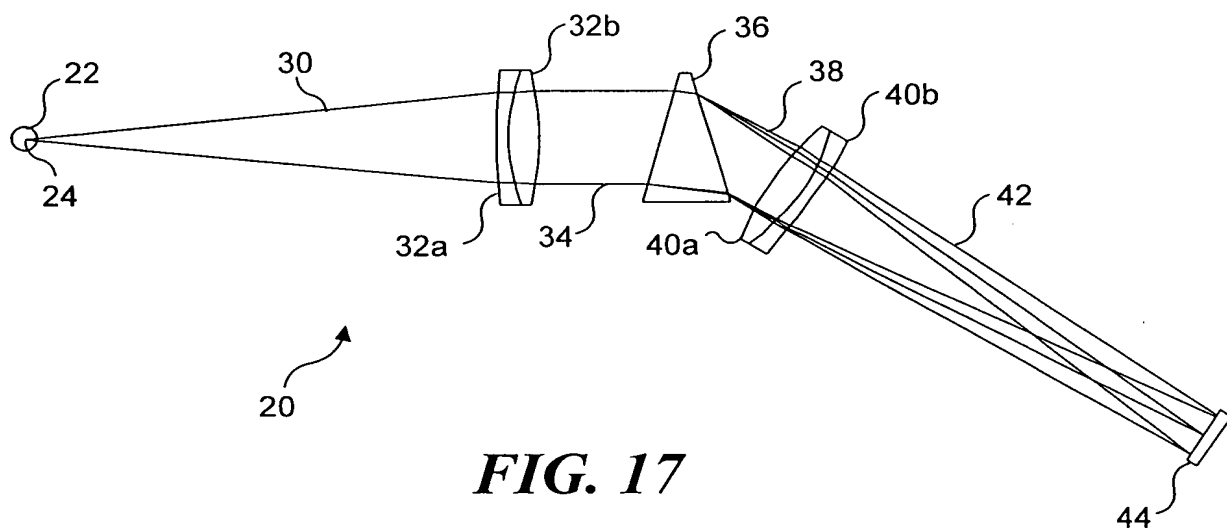


FIG. 16
REALIGNMENT AND CROSSTALK CORRECTION
APPLIED TO MULTI-CHANNEL IMAGE



MOVING
OBJECT

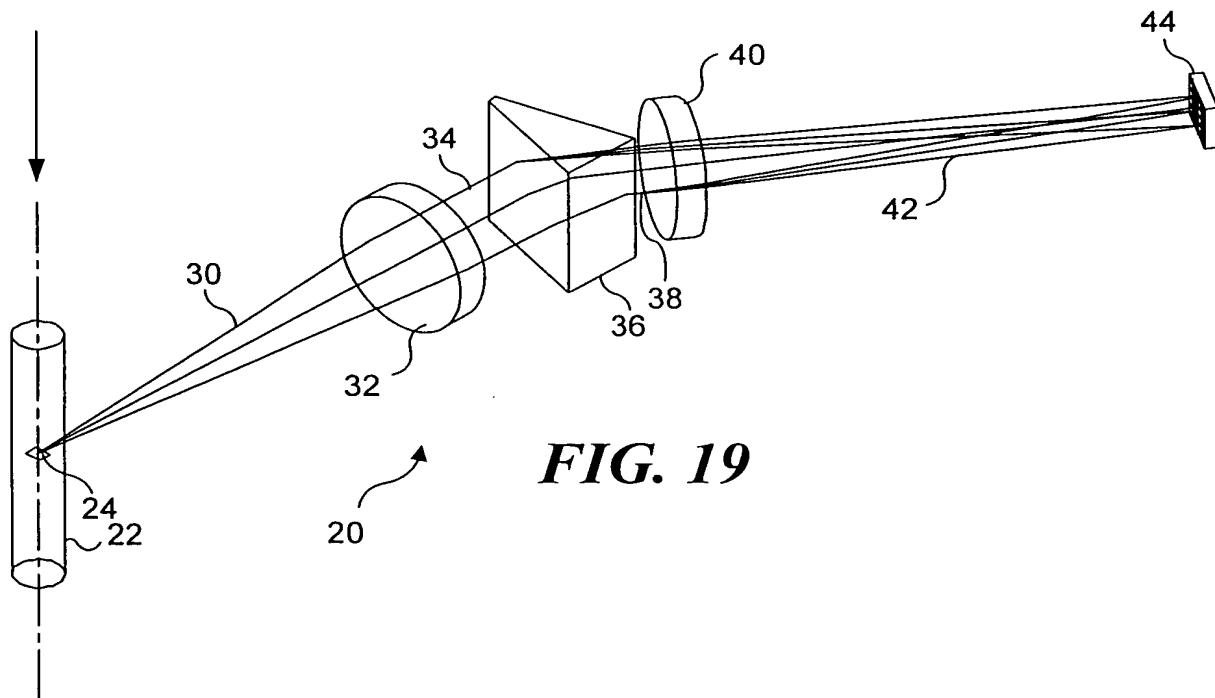


FIG. 19

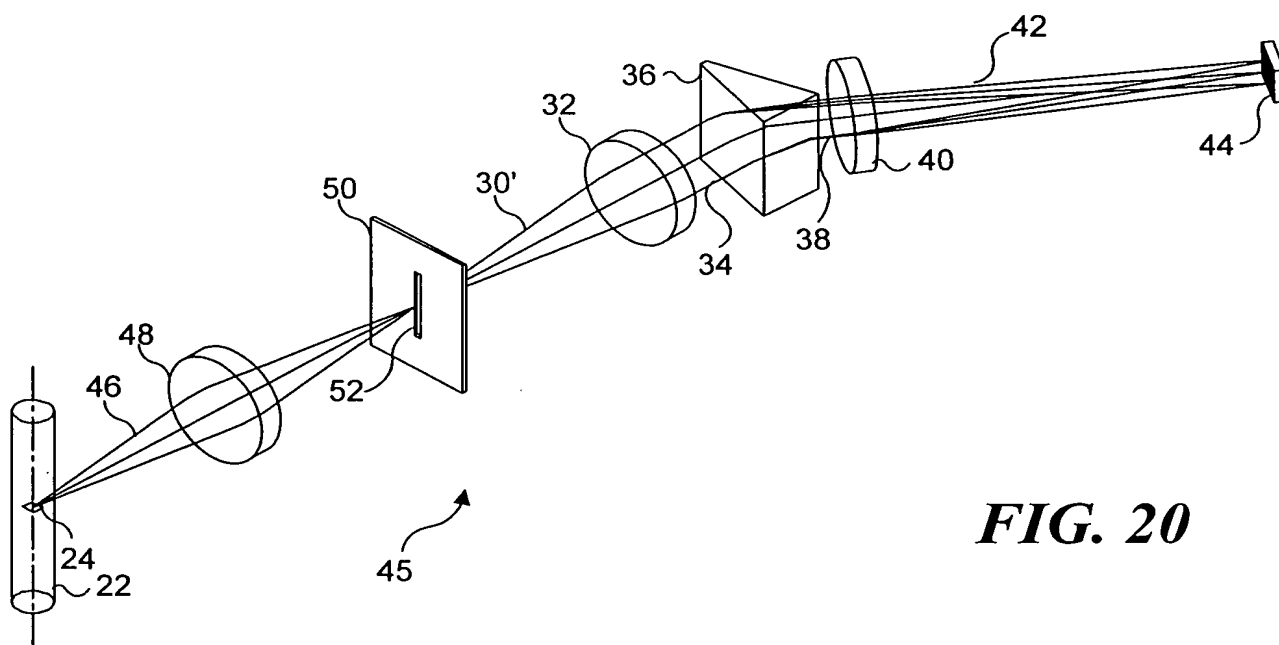


FIG. 20

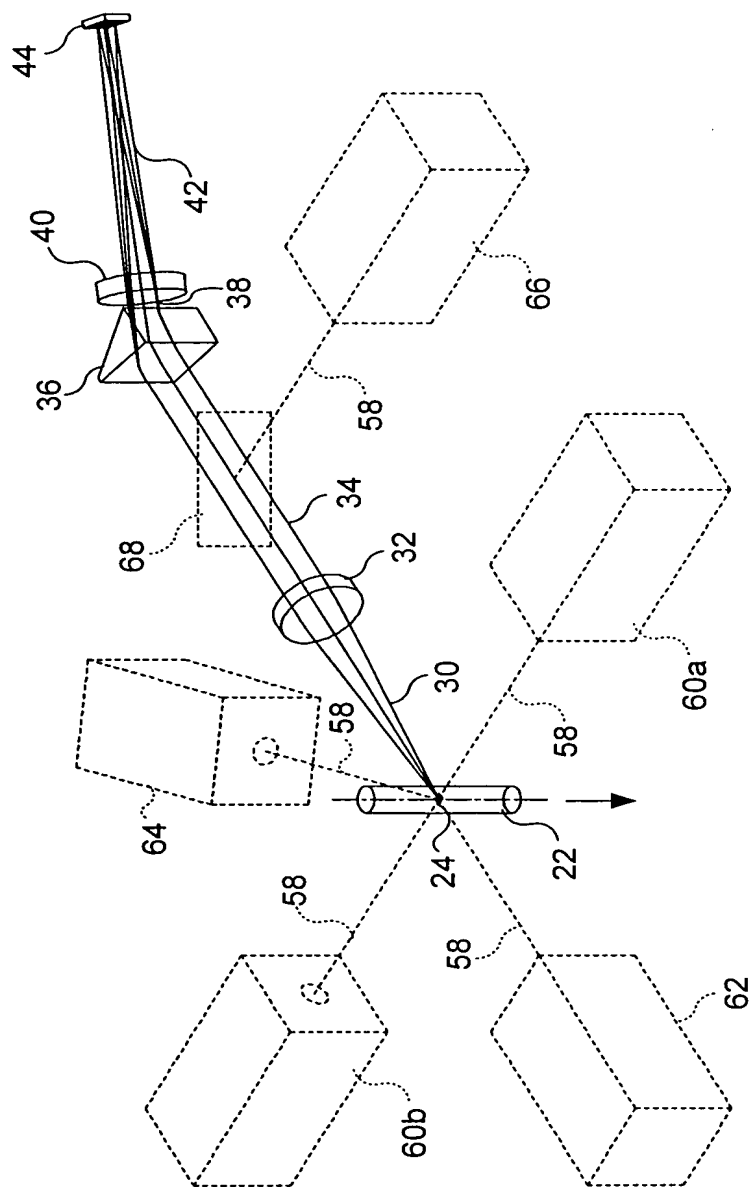


FIG. 21

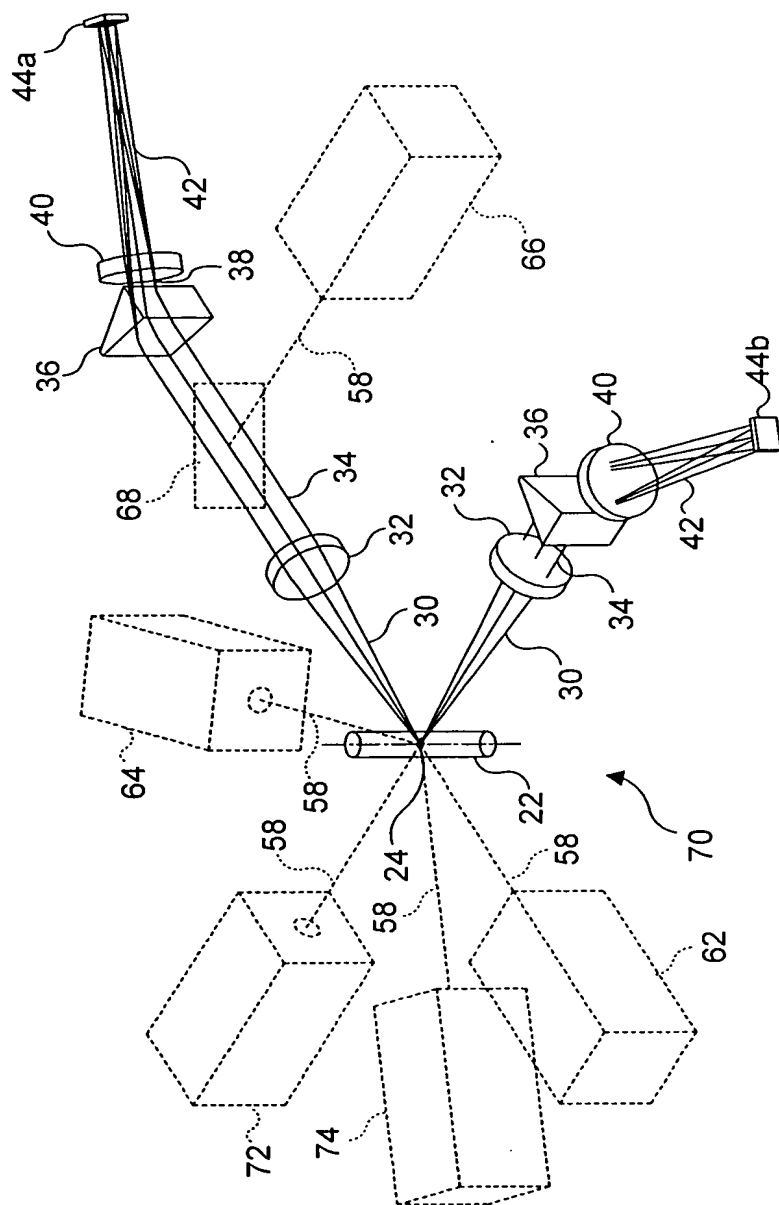


FIG. 22

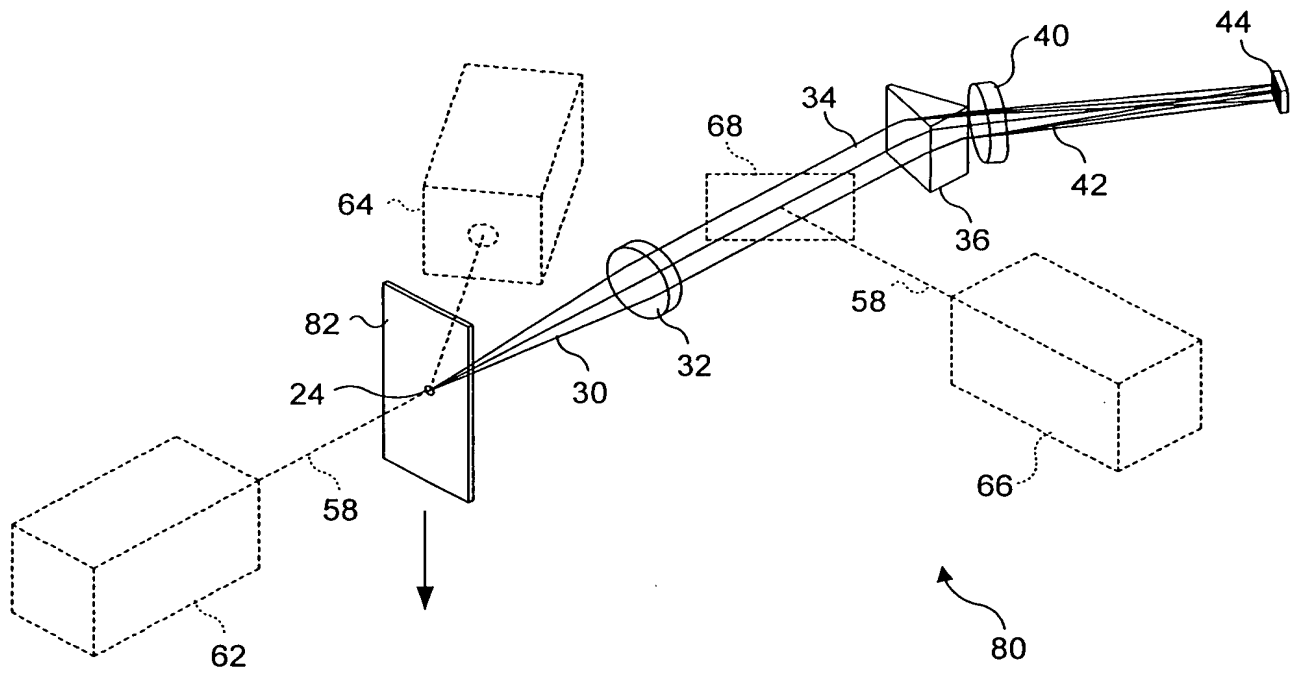


FIG. 23

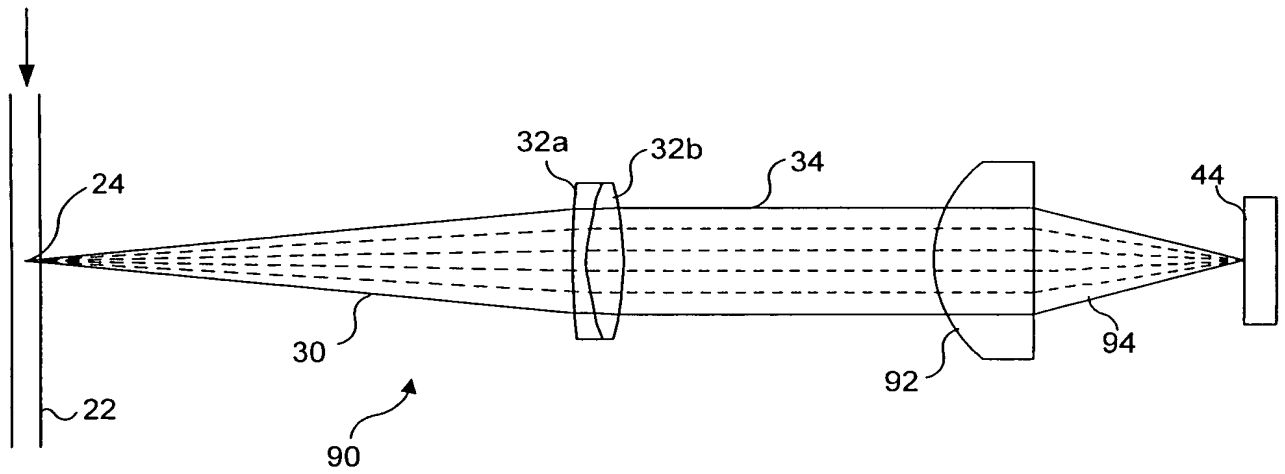


FIG. 24A

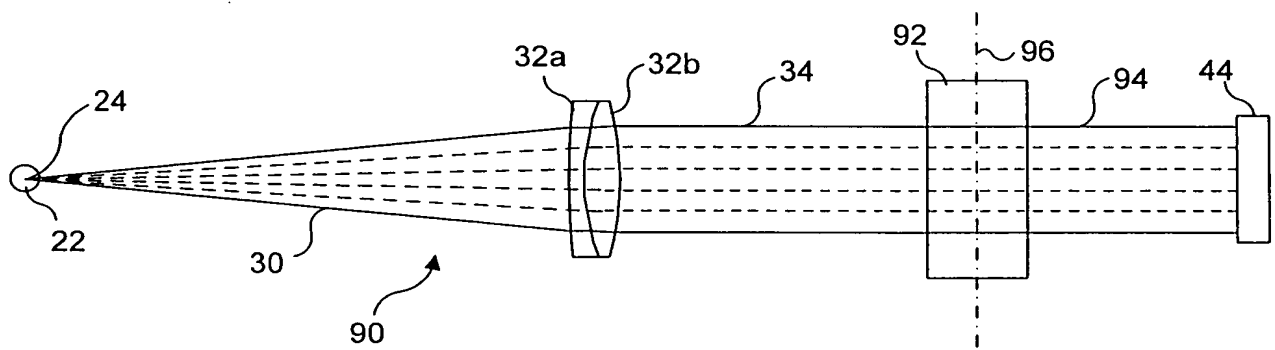


FIG. 24B

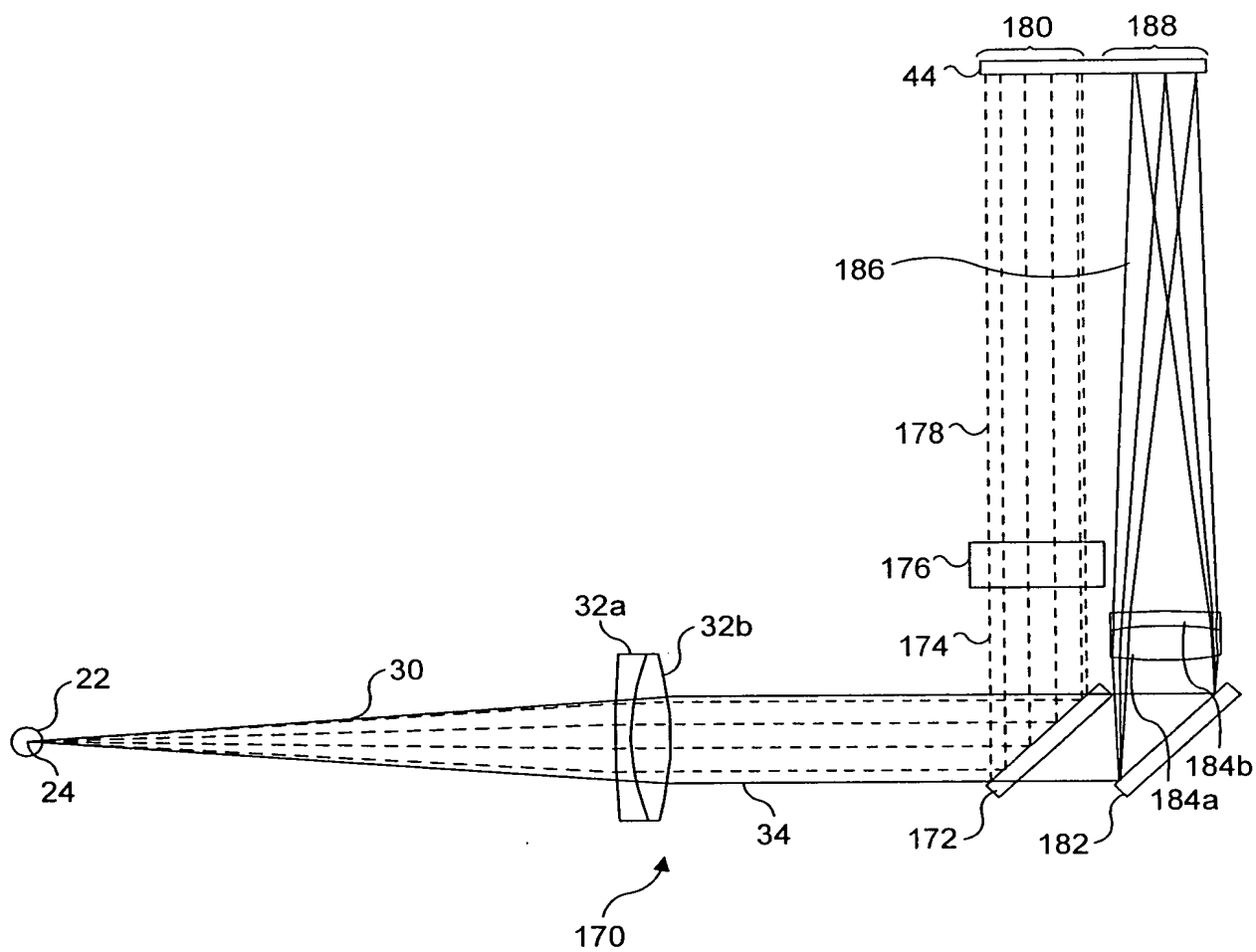


FIG. 25

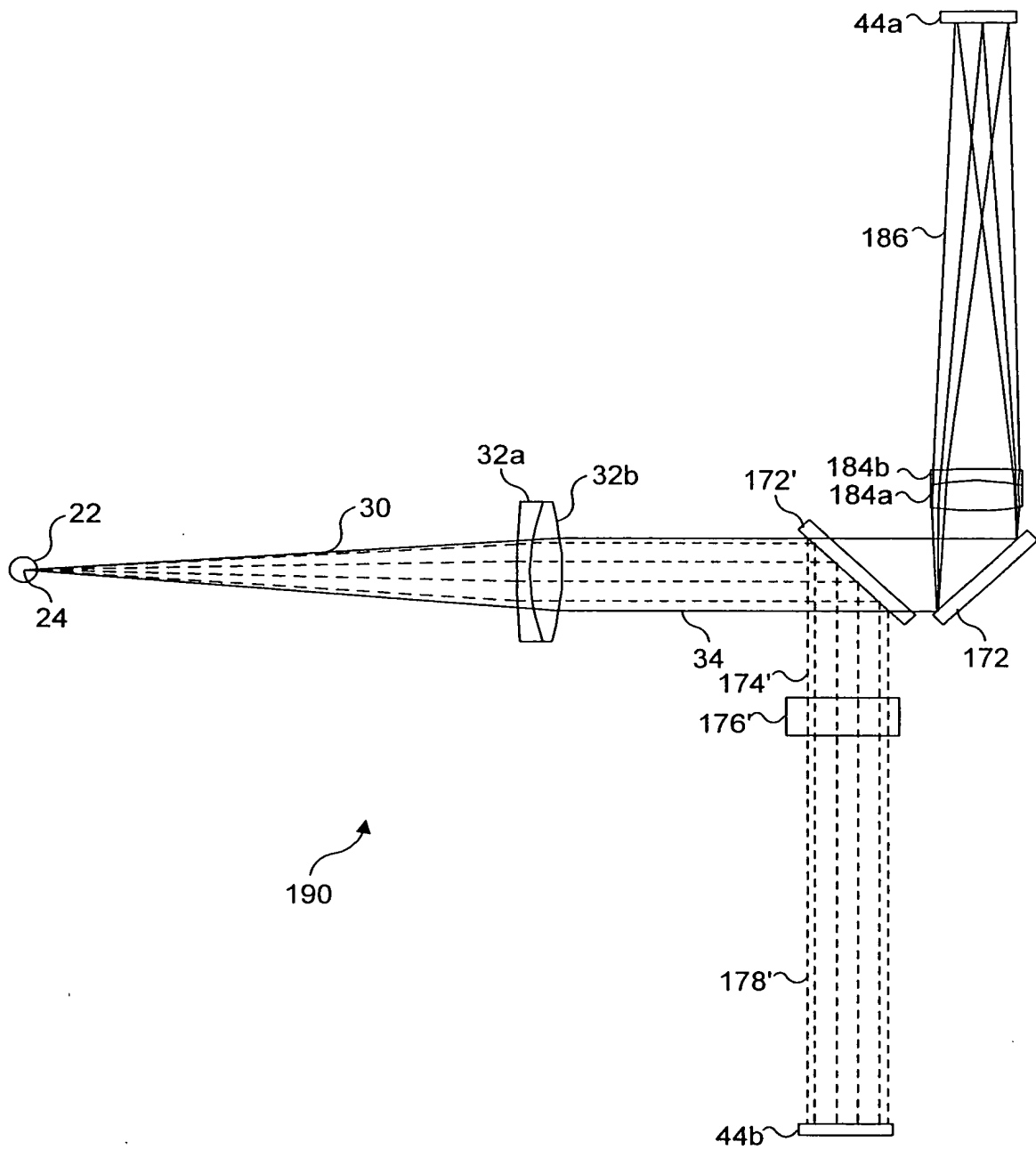


FIG. 26

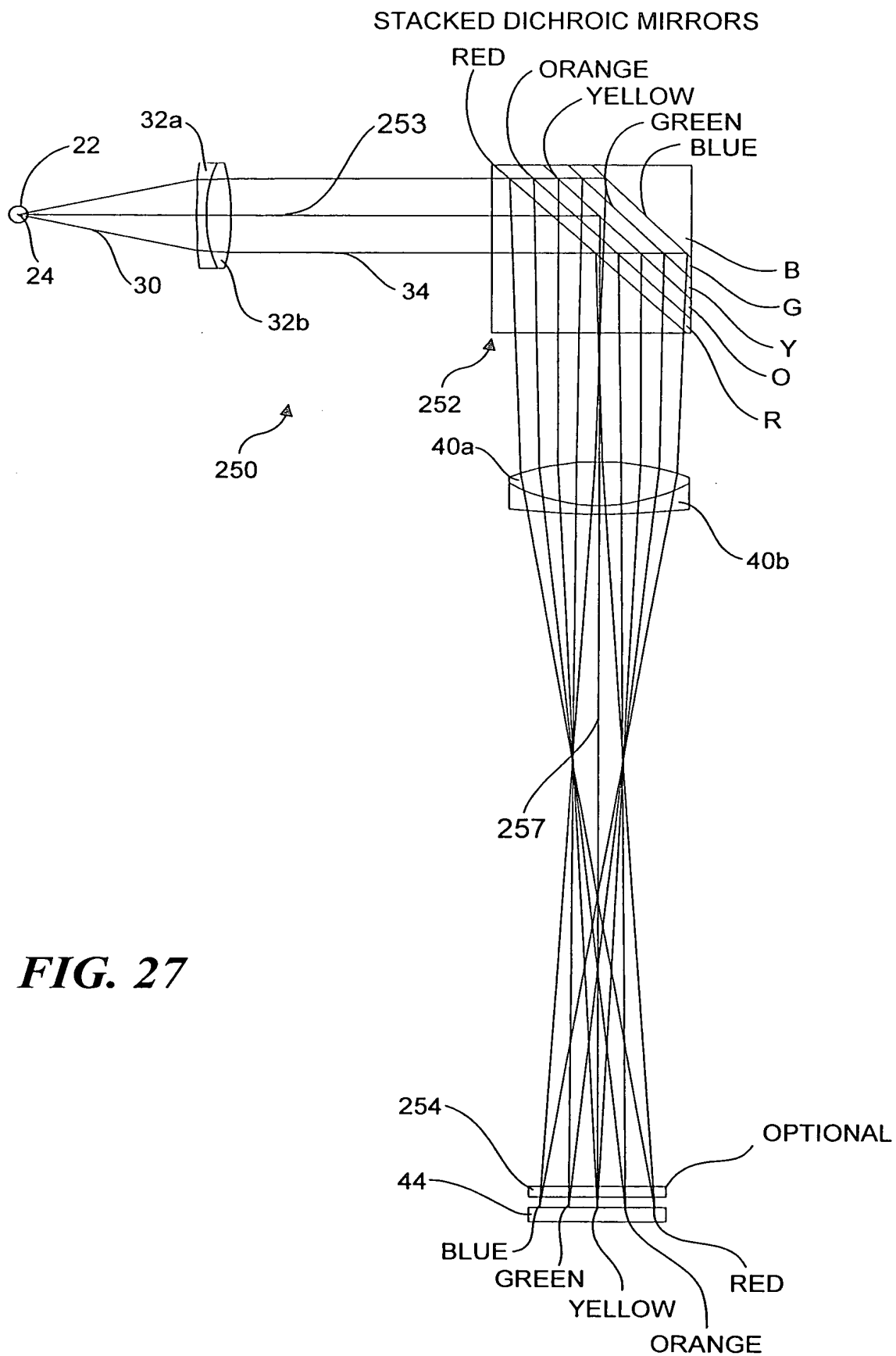


FIG. 27

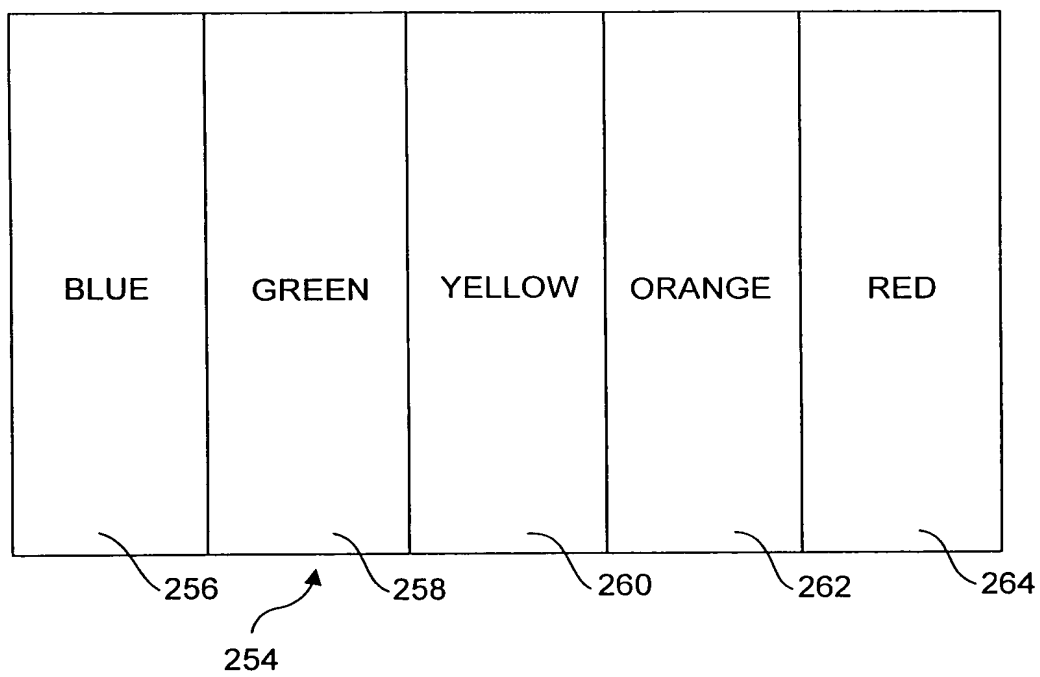


FIG. 28

